

ABSTRACT

Disclosed herein is a dispenser that comprises a seal disk (30), a valve member (40), a plunger guide block (50), a cam-follower guide block (60), a motor (3), and an end cam (5). The seal disk (30) has communication holes (31), (32) and a sliding surface (33). The valve member (40) has a sliding surface (41), three plunger holes (42) and three plungers (80) inserted in the plunger holes (42). The cam-follower guide block (60) has three guide holes (62) in which cam followers are inserted. The motor (3) rotates the cam-follower guide block (60). Each cam follower has a body (70) having a semispherical recess (71) and a ball (75) held in the recess (71) and contacting the cam surface (5A) of the cam (5). The coefficient of friction between the ball (75) and the recess (71) is smaller than the coefficient of friction between the ball (75) and the cam surface (5A). The balls (75) roll on the cam surface (5A), moving the cam followers back and forth, parallel to the axis of the dispenser and driving the plungers (80) back and forth.